

### REMARKS

Claims 1-3, 5-9, and 11-31 are now pending in the application, claims 4 and 10 having been canceled and new claims 15-31 having been added by the above amendment. Support for the new claims can be found throughout the specification. For example, support for new claim 15-19 can be found, *e.g.*, at page 3, lines 23-31 and page 4, lines 5-7. Support for new claim 20 can be found, *e.g.*, at page 1, line 27 through page 2, line 9, and at page 14, lines 15-17. Support for new claims 21 and 29 can be found, *e.g.*, at page 8, lines 23-25. Support for new claims 22-25, 30 and 31 can be found, *e.g.*, at page 18 in the second table. Support for new claims 26-29 can be found, *e.g.*, at page 13, lines 20-26, at page 14, lines 18-20, and at page 18 in the table. Support for new claim 27 can be found, *e.g.*, at original claim 4. No new matter has been added.

Applicants elect the invention of Group 1 (original claims 1-4 and new claims 15-27). Applicants further elect the polymorphism at position 811 as defined by the position in SEQ ID NO:16, wherein the nucleotide at position 811 is a cytosine. The election is made with traverse.

The Examiner alleges that "Groups 1-5 do not relate to a single general inventive concept under PCT Rule 13.1 because, under Rule 13.2, they lack the same or corresponding special technical features." Restriction Requirement at page 2. The Examiner finds a lack of the same or corresponding technical feature because he believes that Laubert *et al.* teaches OATP8 and variants of OATP8. *Id.* Applicants do not agree that Laubert teaches OATP8 or variants of OATP8. The Examiner refers to page 13, lines 18-31, of Laubert for support, but this section does not teach variants of OATP8.

Comparison of the amino acid sequences in Laubert (SEQ ID NOs:3-10) with Applicants' SEQ ID NO:17 (the amino acid sequence of OATP8) indicates that while Laubert may describe a member of the OATP protein family, this reference does not appear to describe OATP8. Amino acid differences between SEQ ID NO:17 in Applicants' specification and SEQ ID NO:3 of Laubert *et al.* occur at least at positions 13-15, 18, 23, 27, 36, 38, 42, 45, 51, and 53. Applicants did not compare the sequences any further, as it seems clear that the ATnov proteins described in Laubert *et al.* are not OATP8 as represented by SEQ ID NO:17 in Applicants' specification. SEQ ID NOs:4-10 of Laubert *et al.* likewise differ significantly from the amino

acid sequence of OATP8. Applicants maintain that the OATP8 polymorphisms recited in the pending claims are novel and thus are the special technical features that link the subject matter of all of the claims. Because the requirements of PCT Rule 13.2 and PCT Rule 13.1 are satisfied, Applicants respectfully request that the restriction requirement be withdrawn and the pending claims be examined together.

Applicants note that the method of treatment recited in claim 9 includes a diagnosis step that tracks the method as claimed in claim 1, such that claim 9 could have been written as dependent on claim 1 with no change in scope. New dependent claim 26 depends from and adds a treatment step to, new independent diagnostic method claim 19. New claim 28, while ostensibly drawn to "a method of treatment" includes diagnostic steps as well. All of these examples serve to demonstrate how the diagnostic and treatment methods of the invention of are intertwined and so should be examined together. Applicants further submit there would be no burden on the Examiner to examine these claims together. If the Examiner will not agree to rejoin Groups 1-5 for at least the reasons stated above, Applicants request that at least Groups 1 and 3 be rejoined, such that the methods of treatment of original claim 9 and new claim 28 can be examined with the claims of Group 1.

Applicants also traverse the restriction requirement with respect to the requirement to select "a specific SEQ ID NO and position to which examination will be limited." Restriction Requirement at page 2. The Examiner explains this restriction at page 3: "Structurally distinct protein and nucleotide sequences are distinct chemical compounds at are unrelated to each other...These sequences... are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 USC 121." The Examiner seems to be quoting MPEP 2434, although his quote is not accurate. MPEP 2434 states the quite different proposition that "Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 USC 121" (emphasis added). MPEP 2434 further states that "Nucleotide sequences encoding the same protein are not considered to be independent and distinct and will continue to be examined together." (This point is reiterated in MPEP 803.04.) Indeed, the sequence of an OATP8 gene including any of the SNPs of Applicants' claims still encodes an OATP8 protein. Thus, sequences

including any one or combination of the polymorphisms recited in the pending claims should be searched together. At the very least, Applicants should not be required to limit the nucleotide at the elected position 811 to a particular nucleotide. If the Examiner refuses to search all the SNPs together, Applicants at least request that the Examiner examine the claims where the nucleotide at position 811 is any nucleotide.


Finally, Applicants point out that claims 1 and 9 and new claims 15, 17, and 18 cover determining the sequence at all 17 nucleotide positions or at one or more of the 17 nucleotide positions. If the restriction is allowed to stand, it will limit Applicants to claiming a method of determining the presence or absence of a SNP at only a single one of the 17 positions. The restriction requirement ignores those embodiments of the claims in which the sequence at 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, or all 17 positions is determined. It essentially prohibits the Applicants from presenting such claims in this application or in any divisional.

Applicants strongly protest and request withdrawal of the restriction requirement.

Enclosed is a check for \$1450 to cover excess claims fees. Please apply any other necessary charges, or any credits, to Deposit Account No. 06-1050, referencing Attorney Docket No. 06275-421US1.

Respectfully submitted,

Date:

  
Oct 5, 2006



Janis K. Fraser, Ph.D., J.D.  
Reg. No. 34,819

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906